## **CONSTANT CLIMATE CHAMBERS HPPeco**

according to DIN 12880:2007-05; EN 61010-1 (IEC 61010-1); EN 61010-2-010

Standard units are safety-approved and bear the test marks:



stainless steel, mat. 1.4301 (ASTM 304), Interior:

deepdrawn

Housing:

textured stainless steel 1.4016 (ASTM 430), rear zinc-plated steel 1.0037 (St37-2), intuitively operated TwinDISPLAY (TFT colour display) with

Door:

Sizes 110 to 1060: fully insulated stainless steel doors with 2-point locking (compression door lock) and inner glass door, Sizes 1400 and 2200: stainless steel doors with glass sectors, fully heated inner glass panes integrated in the full-sight glass door with 2-point locking (compression door lock), sizes 750, 1060 and 1400 two leaves, sizes 2700 three leaves.

size 2200 three leaves

mains cable with plug (German type) Connection:

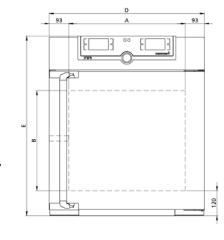
Installation:

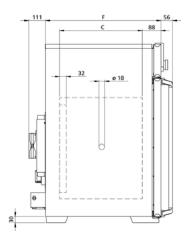
Sizes 110 and 260: 4 adjustable appliance feet, Sizes 410 to 1060: on lockable castors, Sizes 1400 and 2200: on height-adjustable and

lockable castors

Interfaces:







Model sizes/Description	on			110	260	410	750	1060	1400	2200	
Stainless steel interior	Volume		1	108	256	384	749	1060	1360	2140	
	Width	(A)	mm	560		640	10	)40	1250	1972	
	Height	(B)	mm	480	800 1200			1450			
	Depth (less 32 mm for fan - Peltier)	(C)	mm	400	500		600	850	7	50	
	Max. number of grids/shelves		number	5	9		14		28	42	
	Max. loading per grid/shelf		kg		20		30	60	3	0	
	Max. loading of chamber		kg	150	200			250	330		
	Max. loading per slide-in drip tray		kg	3			8		-		
	Max. loading per bottom drip tray		kg	3	3 4			8	-		
Textured stainless steel exterior	Width	(D)	mm	745	824		1224		1435	2157	
	Height (sizes 410, 750, 1060, 1400 and 2200 with castors)	(E)	mm	864	4 1183		1720		1913		
	Depth (without door handle, depth of handle +56 mm, +111 mm Peltier element)	(F)	mm	555	655		755	1005	9	05	
Standard equipment	Standard works calibration certi- ficate (measuring point chamber center)		°C	+25 °C / 60 % rh, +40 °C / 75 % rh							
	Stainless steel grid, electropolished		number	2 4 6							
	Water tank including connection hose			•							
	Entry port (silicone), 18 mm clear diameter, moisture tight, can be closed by silicone stopper, in the side panel, centre left					•				-	
Temperature	Working temperature range without light, without humidity		°C	0 (at least 20 below ambient temperature) up to $+70$							
	Working temperature range without light, with humidity		°C	+5 (at	least 20 bel	+15 (at least 10 below ambient temperature) u to +60					
	Working temperature range with light, without or with humidity		°C	+15 to +40					<del>-</del>		
	Setting temperature range without light, with humidity		°C	+5 to +70				+15 to +60			
	Setting temperature range with light, with humidity		°C	+5 to +70					-		
	Setting temperature range with light, without humditiy		°C		0 t	-					
	Setting temperature range without light, without humidity		°C								
	Setting accuracy		°C	0.1							

Model sizes/Descr	ription		110	260	410	75	50	1060	1400	2200	
Humidity	Setting range humidity without light	% rh	10 to 90						10 to 80		
	Setting range humidity with light	% rh	10 to 90						_		
	Setting accuracy	% rh	0.5								
Further data	Electrical load at 230 V, 50/60 Hz	W	420 700					1/1	1400 200		
ruitilei uata	Electrical load at 115 V, 50/60 Hz	W		420		70		14		2000	
	Electrical load at 115 V, 30/00 Hz		42					141	JU	-	
	equipment performance option P1	W	-	700		14	1400		-		
	Peltier elements in the rear	number	1			2	2	4		6	
Packing data	Net weight	kg	64	94 134		19	7	259	347	474	
	Gross weight (packed in carton)	kg	87	133	184	26		339	525	718	
	Width	mm	830	133	930	13		1370	1560	2300	
	Height	mm	1050	1380	1930	19		1970	22		
	Depth	mm	800	1300	930	10		1300	11		
Order No. Consta	nt Climate Chambers		HPP110eco	HPP260ec					HPP1400eco		
Order No. Consta	int Climate Chambers		TIFFTTOECO	TIFF 200eC	.0 11114106	CO HEFF.	Juecu I	HIFF TOOUECO	TIFF 1400eC0	11112200	
Options				110	260	410	750	1060	1400	2200	
260 and 410 from	option increases the number of installed Pelin 1 to 2, and in size 750 from 2 to 4 units. The oroves technical specifications.			-		P1			-		
· · · · · · · · · · · · · · · · · · ·	iction; Temperature: +60 °C					A8				-	
Chamber modification for the application of reinforced perforated stainless steel shelves or stainless steel grids (bearing rails mounted in the working chamber - standard with 1060) - includes replacement of standard grids by reinforced grid			er -		- K1				-		
Cold white 6,500 K light module: LED light strips on the side walls, 10 for mod 110, 14 for model 260/410/750, programme-controlled dimming from 0 to 10 (in 1 % increments), ramp programming in conjunction with temperature and hidity. Requires option P1 for sizes 260, 410 and 750 at an extra charge. Stanfeed-through not required for sizes 110 and 260.			100 % d hu-	Т7					-		
Light module cold white 6,500 K + warm white 2,700 K: LED light strips - 10 for model 110, 14 for model 260/410/750 - (alternating 5 or 7 light strips cold white and 5 or 7 light strips warm white) on the side walls, programme-control dimming from 0 to 100 % (in 1 % increments), ramp programming in conjunct with temperature and humidity. Requires option P1 for sizes 260, 410 and 750 an extra charge. Standard feed-through not required for sizes 110 and 260.			old rolled nction	n 18 It					-	-	
Light module warm white 2,700 K: LED light strips on the side walls, 10 for mod 110, 14 for model 260/410/750, programme-controlled dimming from 0 - 100 (in 1 % increments), ramp programming in conjunction with temperature and I midity. Requires option P1 for sizes 260, 410 and 750 at an extra charge. Stanfeed-through not required for sizes 110 and 260.			00 % d hu-	Т9					-		
Interior socket (can only be ordered with limited temperature range - max. +60 °C), ampacity 230 V / 2,2A / 500W, can be switched off with the On/Off switch cannot be switched individually, moisture tight IP68 (requires option A8 against surcharge) (max. one per appliance)			tch,	R3					-		
Entry port with 23	3 mm clear diameter,	left centre	e/centre	centre F0					-		
can be closed, sta	indard position (F0 odd) odel size 260 with	left cer	ntre/top			F1			-		
light module; FO -	· F3 not for model size	right centre	/centre F2					-			
110 with light module	odule)	right cer	ntre/top	pp F3					-		
Entry port with 23	3 mm clear diameter,		left								
can be closed, ind (please state posi-			right				F5				
<u> </u>		rear								-	
Entry port (siliconstopper, at the ba	e), 40 mm clear diameter, moisture tight, car ck (please state location)	n be closed by	ilicone F7						-		
Entry port (siliconstopper, standard	e), 40 mm clear diameter, moisture tight, car position rear	be closed by	D8								
4 - 20 mA current		oller actua <b>l</b> val +80 °C = 4 <del>-</del>			V3						
supply) - Standard	rying (efficient dehumidification of the interi d factory calibration certificate (measuring pc with 10 % rh. (requires option P1 for sizes	oint centre of ι	sable						-		
Door with lock an	id key (safety lock)	One lock		k B6					-		
	Two	locks (one eac	h door)						B62	-	
	Three	locks (one eac	h door)			-				B63	
Potential-free con fau <b>l</b> t, fuse)	tact for combination error message (e.g. sup	ply failure, ser	sor				H6				
Process-dependent programmable				One D4 -					-		
door lock		Two (one eac				-			D42	_	
				r) -							

Options	110 260	410	750	1060	1400	2200	
Door-open-recognition One		V5				_	
Two (one each door)		V52	-				
Three (one each door)			V53				
MobileALERT, notification by SMS in case of any error or alarm of the device (requires option H6)	C3						
MobileALERT for 2 alarm notifications; notification by SMS. temperature and humidity alarm (requires option H6)	C4						
Castor frame (2-part), height 140 mm	R9			-			

Castor frame (2-part), height 140 mm		R9			-				
Accessories	110	260	410	750	1060	1400	2200		
Stainless steel grid, electropolished	E20165	E28891		E20182	B41251	B38955			
Reinforced stainless steel grid, electropolished, max. loading 60 kg; size 750 with guide bars and fixing screws (requires option K1). Please consider max. loading of chamber	E29767	E29766		B32190	B32550	-			
Stainless steel perforated sheet (may affect the temperature distribution). With option P1, the performance is increased for sizes 260, 410, and 750.		B00325 B29725		B00328		-			
Reinforced stainless steel shelf, max. loading 60 kg; with guide bars and fixing screws (requires option K1). Please consider max. loading of chamber. With option P1, the performance is increased for sizes 260, 410, and 750.	-			B32191	B32549	-			
Stainless steel slide-in drip tray, 15 mm rim, with guide bars and fixing screws (may affect the temperature distribution, requires option K1)	-			B32763		-			
Stainless steel slide-in drip tray, 15 mm rim (may affect the temperature distribution, not in connection with option K1 for sizes 450/750 )	B02073	B02073 B29726		B02075	B32599	-			
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, requires option K1)	-		B34055		-				
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, not in connection with option K1 for sizes 450/750)	B04359	B29	9722	B04362	B29769	-			
Holder for water tank (sizes 110 - 750: 2.5 litres, sizes 1060/1400/2200: 10 litres) for mounting on the rear of the appliance. Standard equipment for sizes 410, 750, 1060, 1400 and 2200	B49	B49092							
Central water supply with filter cartridges for connection to the domestic water supply. Product information on demand	ZWVR6								
Central water supply without filter cartridges for connection to the domestic water supply (only for demineralised water with a conductivity of 5 to 10 $\mu$ S/cm and a pH value between 5 and 7). Product information on demand	ZWVR7								
Flush-fit unit (stainless steel frame covering gap between oven and wall opening), with air slots	B29734	B29738	B42116	B42116 B29742			-		
Flush-fit unit (stainless steel frame covering gap between oven and wall opening), without air slots	B29735	B29739	B42117	B29	9743 -		-		
Stacking set (4 pcs) for stacking of appliances of same size	B29744				-				
Set of height adjustable feet (4 pcs)	B29	9768			-				
Subframe, adjustable in height (height 500 mm)	B29749	B29751			-				
Subframe, on castors (height 560 mm)	B29750				-				
Subframe, adjustable in height, height 130 mm	B33661	B33664			-				
External measuring instrument with sensors for daylight and UV-light. Product information on demand	B04713					-			
External measuring instrument with additional measuring head for temperature and humidity measurement. Product information on demand				B04714					
Accessories   Software and Connectivity	110	260	410	750	1060	1400	2200		
Basic license for "AtmoCONTROL FDA Edition". Meets the requirements for the use of electronically stored records and electronic signatures as specified in the 21 CFR Part 11 regulation by the US Food and Drug Administration (FDA). Respective IQ/OQ documents available in German and English (at no extra charge).				FDAQ1					
FDA integration license for an additional device (up to a maximum of 31 units) into an already purchased FDA basic license.				FDAQ2					
USB User-ID stick (with User-ID licence): Oven-linked authorisation licence (User-ID-programme) on Memory-stick, prevents undesired manipulation by unauthorised third parties. When reordering please specify serial number				B33170					
Ethernet connection cable 5 m for computer interface				E06189					
USB-Ethernet adapter				E06192					